

Bacteriological Analyses for Swimming Pools and Whirlpools/Spas



STATE HYGIENIC LABORATORY
AT THE UNIVERSITY OF IOWA
Iowa's Environmental and Public Health Laboratory
shl.uiowa.edu

The State Hygienic Laboratory's Pool/Spa Water Testing Program

According to Chapter 15, Iowa Administrative Code 641, a sample of water shall be collected from a public swimming pool or whirlpool/spa at least once during each month that the pool is open for use. The tests that should be requested are the following:

Swimming pool

Total coliform

Whirlpool/spa

Total coliform and *Pseudomonas aeruginosa*

The State Hygienic Laboratory maintains a mailing list and automatically sends sample containers to all names on the list each month, providing all previous containers supplied have been returned with water samples. If you wish to be placed on our mailing list to receive containers, please fill-out the attached form, detach and mail it to the Hygienic Laboratory.

Instructions for collecting the sample and the appropriate sample collection form will be included with the sampling container. Please contact the Hygienic Laboratory at 319-335-4500, if you have any questions. You may also find more information on our website, www.shl.uiowa.edu.

Total Coliform Bacteria are microorganisms that are normally present in soil and in sewage. They may be introduced into a pool in many ways, (e.g. from soil or sewage on the body of a patron, etc.) In a properly disinfected and maintained swimming pool or whirlpool/spa, there should be no coliform bacteria present. If coliform bacteria is present in a swimming pool or whirlpool/spa water sample, this indicates a possible sanitary defect in the system. In order to troubleshoot the bacterial water quality problem, a review of the sample collection procedure should be done first. If the sample was collected properly and represents the swimming pool or whirlpool/spa water, evaluate all aspects of pool sanitation and take immediate action to ensure compliance with water quality standards.

Pseudomonas aeruginosa is a common bacterium found in the environment and may be present on human skin, hair and in feces. It can be introduced into a pool in many ways, (e.g. from the soil carried on the feet of the user.) If a swimming pool or whirlpool/spa sample is positive for *Pseudomonas aeruginosa*, immediate action should be taken to evaluate the cause and ensure compliance with water quality standards. In a swimming pool or whirlpool/spa environment, the defect is more likely a problem with the filter cleanliness but all aspects of swimming pool or whirlpool/spa sanitation should be evaluated.

Request for Swimming Pool or Whirlpool/Spa Sampling Kits

Opening Date _____

Closing Date _____

Number of pool sites to be tested for each month:

Swimming Pool (Deep) _____

Swimming Pool (Shallow) _____

Wading Pool _____

Whirlpool _____

Total Sites _____

Please send sampling containers to:

Facility Name _____

Address _____

City, State, Zip _____

Phone Number _____

Comments _____

Based on the results of the tests conducted on your swimming pool or whirlpool, it may be necessary for you to seek guidance in restoring your pool to bacterial safe levels. For such guidance please contact your local pool inspection agency or the Iowa Department of Public Health.

**Iowa Department of Public Health
Swimming Pool Program
321 E. 12th Street
Des Moines, IA 50319-0075
Phone: 515-281-8722
http://idph.state.ia.us/eh/swimming_pools.asp**

- Swimming Pool and Spa Rules
- List of Iowa Pool Inspection Agencies by County

**The following action should be taken if a
sample is positive for total coliform
or *Pseudomonas aeruginosa*:**

1. Correct any deficiencies – disinfectant residuals; pool chemistries, esp. pH level; water clarity; filter backwashing or cleaning; proper sample technique
2. Swimming Pool: superchlorinate to breakpoint (make sure filter is clean and backwash high chlorine water through filter)
3. Whirlpool/Spa: drained, cleaned, and disinfected and filter cleaned and disinfected (or replaced)
4. Bring disinfectant residuals back to normal levels
5. Submit check samples (automatically sent to Hygienic Lab pool program participants)

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